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Patented Oct. 6, 1936

2,056,534

UNITED STATES PATENT OFFICE

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Oct. 30, 1956

H. S. CAHEN ET AL

2,768,645

VALVE STRUCTURE

Filed Aug. 24, 1953

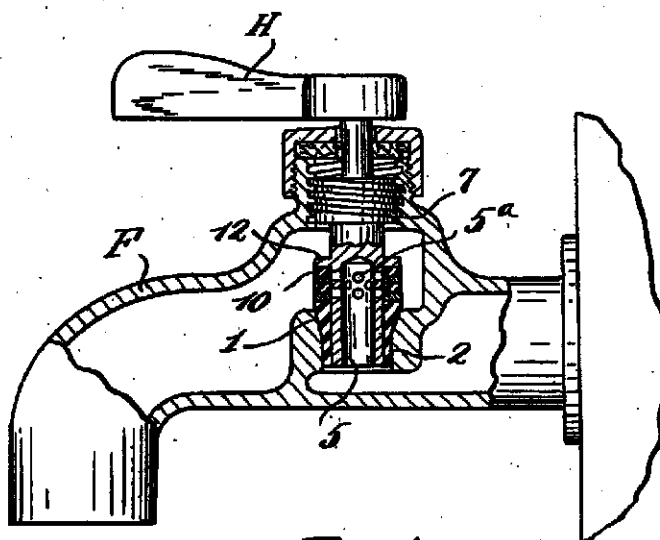


FIG. 1

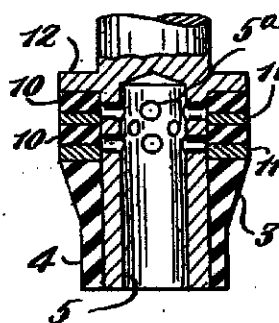


FIG. 3

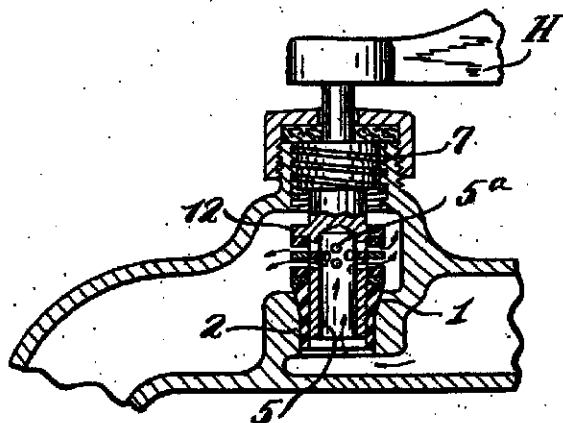


FIG. 2

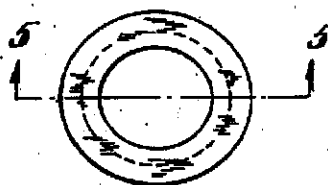


FIG. 4



FIG. 5

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VALVE STRUCTURE

Herman S. Cahen and Alfred B. Cahen,
University Heights, Ohio

Application August 24, 1953, Serial No. 373,972

2 Claims. (Cl. 137—625.39)

This invention relates to the class of valves and particularly this improvement is for a faucet.

As is no doubt well known, the gasket in the present-day faucet has to be renewed quite frequently due to wear from its grinding action upon its seat as it is turned to closed position. Such wear of course means leakage and corresponding wear upon the thread of the closure means.

It is therefore the object of our present invention to devise a faucet valve in which there may be an effective opening and closing of the valve without undue wear upon the gasket means and the screw thread of the closure means so as to ensure more dependable sealing engagement and longer life of usefulness.

A further object is to devise such a faucet valve in which the gasket means is so constructed and arranged that it will afford an effective and dependable seal when closed and in which the water pressure may be depended upon to assist in initiating and increasing the opening of the valve and hence the flow of the liquid therethrough as the valve is opened.

Another object is to devise such a faucet valve in which there is movement of the sealing gasket means during the opening of the valve and also during the closing of the same so as to thereby maintain the elastic sealing means in live condition over a prolonged period of time.

Another object is to devise such a faucet valve in which there is precluded danger of the several separate sealing gaskets adhering together, thereby ensuring prompt and dependable initiation and augmentation of the flow upon manipulation of the faucet.

Another object is to devise such a faucet valve in which there may be obtained a flow therethrough without turning the valve closure member to such a great extent as is required in at least some of the prior devices.

Other objects will appear from the following description and claims when considered together with the ac-

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The sealing gasket, just referred to, has its inner surface of cylindrical form throughout its entire extent and is adapted for mounting snugly upon the cylindrical depending portion 5 of the valve closing member which has screw-threaded engagement 7 with the faucet F; and there is provided a conventional form of handle H for manipulation of the same in the usual manner.

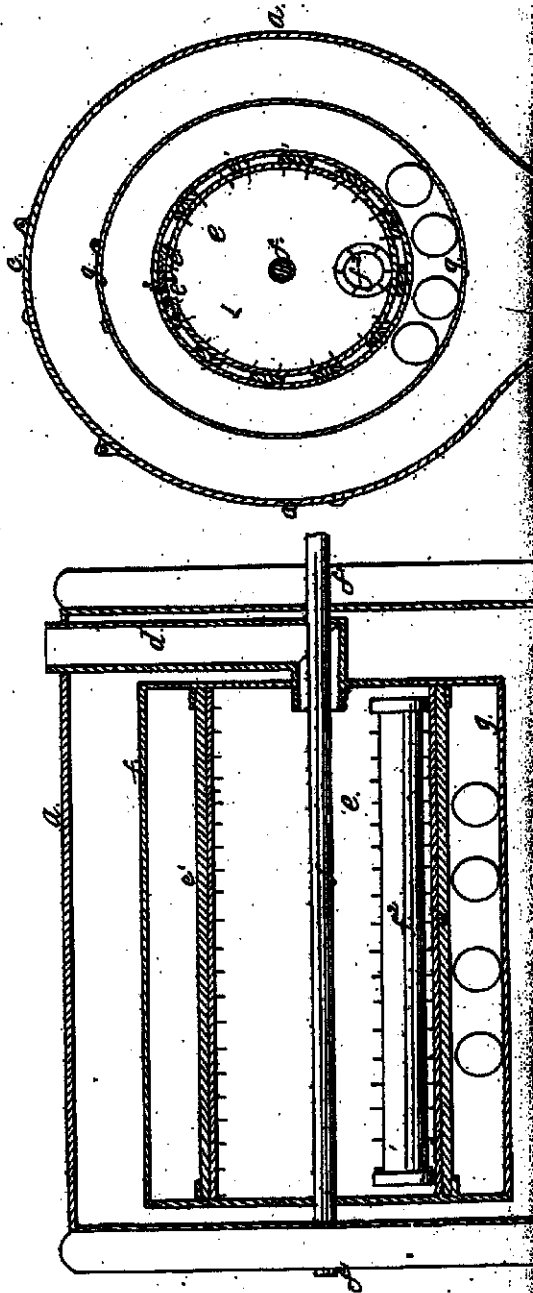
The cylindrical portion 5 is of hollow form and is open at its lower end and closed at its upper end. The upper part of this hollow portion 5 is provided with a plurality of openings 5a through the wall thereof so as to permit flow of the liquid outwardly therethrough. Also, upon the cylindrical portion 5 there are a plurality of alternating annular gaskets 10 of elastic sealing material, as for instance rubber, and washers 11 of rust-proof material as for instance brass. The uppermost gasket element is of rubber and is adapted for bearing engagement against the annular flange 12 at the upper end of the cylindrical portion 5; and the lowermost one of these gasket elements is of brass and is adapted for engagement against the upper end of the gasket that has the conical outer surface portion, this gasket at its upper end being of substantially the same diameter as the other annular sealing elements just referred to.

These parts are so constructed and arranged that when the handle H is turned so as to bring the valve to closed position, the lowermost gasket will have its conical seat-engaging portion brought into effective engagement with the conical seat 1; and continued turning of the valve towards closed position will cause the cylindrical portion 5 to move down further through the sealing elements and to effect clamping sealing engagement of the annular members 10 and 11 between the annular flange 12 and the upper end of the lowermost gasket that has the conical portion. In such closed position the holes 5a are all closed and sealed by the compressed annular gasket and washers 10 and 11 and the lowermost gasket which bears against the conical seat 1. Thus there is an effective seal.

Then upon turning the handle H toward open position, the pressure of the flange 12 upon the annular gasket and washer elements and in turn upon the valve seat 1 is relieved and the force of the water or other liquid up through the hollow portion 5 and out through the holes 5a will separate the annular members 10 and 11 and the lowermost gasket and the liquid will be permitted to flow out therebetween for discharge of the same from the nozzle of the faucet. Such flow will be initiated as soon as there is sufficient turning of the handle to permit such separation of the sealing elements in the manner just explained, while the lower end of the cylindrical portions 4 and 5 remain within the cylindrical portion 2 of the

P., W. S. & J. J.
MILL FOR GRINDING

No. 10,452.



UNITED STATES PATENT OFFICE

PETER HENCH, W. S. HENCH, AND J. J. HENCH,

MILL FOR GRINDING

Specification of Letters Patent No. 1,111,111

To all whom it may concern:

Be it known that we, PETER HENCH, W. S. HENCH, and J. J. HENCH, of Port Royal, in the county of Juniata and State of Pennsylvania, have invented certain new and useful Improvements in Modes of Grinding Sumac, and that the following is a full, clear, and exact description of the principle or character which distinguishes it from all other things before known and of the usual manner of making, modifying, and using the same.

Much difficulty has heretofore been experienced in grinding sumac for the market to reduce it to fine impalpable powder, and assort the different qualities, and grind it fine enough; and it has always been attended with great loss, filling the mill with dust, and making the labor of attending it very great; and by all the apparatus heretofore used, a small quantity could be ground, compared to the power expended, so that eight or nine hundred pounds a day was all that could be effected in one machine, requiring the constant labor of a man, while in our machine, with less expenditure, of power, more than double the work can be accomplished with the attention of a boy only a part of the time, and entirely removing the annoyance of dust; and further, the material has never been ground to the quality of the Sicily sumac, which brings about eighty dollars per ton, while the American article often sells for forty, from its inferior manufacture.

Our apparatus employed is constructed as follows:

An outer case (a) is made of cylindrical form above, but with its under side projected downward, and gathered toward a spout or spouts (b); below, within the cylindrical part of this outer shell or case, there is a door (c'), and on the top an oblong opening (c), to introduce the material to be ground into the inner cylinder (e) and a pipe (d) also for introducing the material down to the center of the cylinder (a) and into an inner cylinder (e) concentric with the circle of the outer case. Within the case is the above named cylinder, marked (e); it turns on a horizontal shaft (f) in bearings (f') in the case, driven by any power convenient. This inner cylinder

What we desire to secure by Letters Patent is—

The employment of a cylinder (e) having projecting points, or teeth on its internal surface with a roller having heads on its ends on which it rolls and is kept above said teeth, said roller also having teeth projecting from its surface interlocking with those first named on the cylinder by which the better portions of the sumac are beaten off

and passing through the apertures in the cylinder enter another where they are ground fine as described.

PETER HENCH.
W. S. HENCH.
J. J. HENCH.

Witnesses:

DAVID MCKINSTRY,
WILLIAM GEORGE.

DRAWING PAGE UNAVAILABLE

DOCUMENT NUMBER

D 18881

UNITED STATES PATENT OFFICE.

JAMES W. CARVER, OF PAWLET, VERMONT, ASSIGNOR TO HIMSELF, AND
GIBBONS L. KELTY, OF BROOKLYN, NEW YORK.

DESIGN FOR AN AX-HANDLE.

SPECIFICATION forming part of Design No. 18,861, dated January 29, 1889.

Application filed October 6, 1888. Serial No. 287,321. Term of patent 7 years.

To all whom it may concern:

Be it known that I, JAMES WOOD CARVER, of Pawlet, in the county of Rutland and State of Vermont, have invented a Design for a
5 Handle for Axes and Similar Implements, of which the following is a specification.

The design of the shape and configuration of this handle is represented in the accompanying drawings, in which—

10 Figure 1 is a side view of the same. Fig. 2 is a cross-section in nearly full size at the line $x x$, and Fig. 3 is a similar cross-section at the line $y y$.

15 The ax-handle is elliptical in its cross-section, as illustrated in Figs. 2 and 3. The end A is adapted to the tool with which the handle is to be used, and does not form a necessary part of the present design. The contour of the handle is curved longitudinally from
20 the portion A to the projection B, and it is also tapering, as represented. The hand portion C of the handle is in the form of a bulb, being elliptical in section and a half-ovoid at

the back portion and tapering toward a part marked B, Fig. 1. This shape and configura- 25
tion of handle is artistic in appearance and convenient for the hands of the party using the same.

The cross-sections of the handle at all points are elliptical, and a central plane passing lon- 30
gitudinally of the handle coincides with the longest diameters of the ellipses, the longitudinal curved contour being in this plane.

I claim as my invention—

The design of the shape and configuration 35
of the handle, as represented, the same consisting in the design of the curved tapering portion and the bulb, that is a half-ovoid at the back end and elliptical in sectional shape, as represented. 40

Signed by me this 27th day of September, 1888.

JAMES W. CARVER.

Witnesses:

SAMUEL S. SNELL,
FRANK H. VAIL.

United States Patent [19]

Saito

[11] 4,369,077

[45] Jan. 18, 1983

[54] METHOD OF MANUFACTURING AN ELECTROMAGNETIC CORE

[75] Inventor: Shigemasa Saito, Gyoda, Japan

[73] Assignee: Fuji Electric Company, Ltd., Kanagawa, Japan

[21] Appl. No.: 200,421

[22] Filed: Oct. 24, 1980

[30] Foreign Application Priority Data

Dec. 29, 1979 [JP] Japan 54-171878

Dec. 29, 1979 [JP] Japan 54-171879

[51] Int. Cl.³ H01F 1/00

[52] U.S. Cl. 148/120; 148/12 A; 72/275; 72/286; 72/352; 72/360; 29/602 R

[58] Field of Search 148/12 A, 12 B, 120; 29/602 R, 607; 72/275, 286, 352, 360

[56] References Cited

U.S. PATENT DOCUMENTS

1,723,769 8/1929 Davis 148/12 B

3,695,946 10/1972 Demeaux 148/120

3,881,967 5/1975 Cochardt et al. 148/120

3,952,571 4/1976 Yokota et al. 72/286

OTHER PUBLICATIONS

"Magnetic Characteristics of Mild Steel" by Hachiro Takubo and Fumio Tsutsumi, published in *Nitsuko Giho* No. 3 (1970).

Primary Examiner—John P. Sheehan
Attorney, Agent, or Firm—Brumbaugh, Graves, Donohue & Raymond

[57] ABSTRACT

A method of manufacturing stationary electromagnetic cores utilizes mild steel having a carbon content of up to 0.01% by weight and an impurity content of less than 0.31% by weight. Use of this material lowers the cost of manufacturing electromagnetic cores by shortening the drawing process and obviating the necessity for magnetic annealing.

9 Claims, 9 Drawing Figures



FIG. 6



FIG. 7



FIG. 8